

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

## APR 1 9 2013

OFFICE OF WATER

Ms. Maia D. Bellon Director Washington Department of Ecology P.O. Box 47600 Olympia, WA 98504-7600

Dear Ms. Bellon:

Thank you for your letter of December 24, 2012, requesting that the Environmental Protection Agency (EPA) begin an assessment of water quality criteria relevant to ocean acidification in coordination with the National Oceanic and Atmospheric Administration (NOAA), the Washington State Department of Ecology, and other groups. I appreciate you raising to the EPA the issue of what EPA actions could help advance understanding of the potential impacts of ocean acidification. The EPA applauds the efforts of the state of Washington to address the potential impacts of ocean acidification on the state's marine ecosystem.

The two recent reports by the Washington State Blue Ribbon Panel on Ocean Acidification summarizing ocean acidification research and identifying a broad strategic framework for action present a multi-pronged approach to address the issue. We understand that your request for the EPA to begin an assessment of water quality criteria, which stems from Action 5.1.3 of the Blue Ribbon Panel Report, "[a]ssess the need for water quality criteria relevant to ocean acidification" and Governor Gregoire's Executive Order 12-07, is one of many efforts to address the issue. The EPA agrees with the state of Washington and other experts in the field that recent scientific research indicates that other ocean chemistry indicators and biological parameters, beyond pH, may be relevant for ocean acidification. Such research indicates that data on carbonate system parameters (e.g., pCO2, dissolved inorganic carbon, total alkalinity) and biological metrics of effects may be needed to evaluate ocean acidification.

The EPA is involved in multiple efforts across the agency and federal government to address both the causes and effects of ocean acidification. For example, actions are being taken under the Clean Air Act to reduce carbon dioxide and other greenhouse gas emissions to the atmosphere. The Office of Water has the ability to assess effects and address other contributions to ocean acidification, including local, land-based sources of nutrient pollution that may potentially contribute to the effects of local acidification on marine organisms.

The EPA is continuing discussions on this topic with other pertinent federal agencies, including participating in a recent informational exchange meeting with NOAA. The EPA plans to further these efforts by convening a technical workgroup to evaluate data and research regarding water quality parameters most relevant for understanding and addressing ocean acidification and its causes. The task of this workgroup will be to identify water quality parameters related to ocean acidification to contribute to a better understanding of the scale of potential impacts on aquatic life, relative contribution of drivers and sources, and the most meaningful metrics for assessing potential trends. I expect that this workgroup will be formed and will have initiated discussions within the next 6 months.

Thank you for your interest in water quality criteria for ocean acidification, and, for the leadership the Department of Ecology has shown in advancing the understanding of ocean acidification.

W Gun Lundy
Nancy K. Stoner
Acting Assist Acting Assistant Administrator